U.S. App. No: 10/696,751 Brief in Reply to Examiner's Answer of November 28, 2008

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In Re Application of: John F. Porter

Confirmation No. 7560

Application No. 10/696,751

Examiner: Maki, Steven D.

Filed: October 29, 2003

Group Art Unit: 1791

For:

Methods of Making Smooth Reinforced Cementitious Boards

Mail Stop: Appeal Brief-Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

REPLY BRIEF UNDER 37 C.F.R. § 41.41

This Reply Brief under 37 C.F.R. § 41.41 is filed in response to The Examiner's Answer mailed November 28, 2008.

RELATED APPEALS AND INTERFERENCES

An Appendix of the Examiner's Answer contains a prior Decision by the Board of Patent Appeals and Interferences in a grandparent application, Application No. 09/478,129. The prior Decision states:

(Decision page 7, lines 6-9). "...we note that the appealed claims are directed to a '[c]omposite fabric reinforcement for embedment' <u>not</u> a building product in which a composite fabric reinforcement is embedded." [emphasis in original text]

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The claims on appeal herein are directed to, "A method of making a reinforced smooth cementitious board having a cement skin adjacent to an outer face," which fits the description of the claims that were <u>not</u> considered by the prior Decision.

CLAIMS ON APPEAL

Claim 17 on appeal herein is based on penetrating slurry through an open mesh of a composite and promoting slurry penetration through a thin, porous nonwoven web of the composite and for the slurry to form a cement skin, by having the thin, porous nonwoven web comprise alkali resistant polymer fibers coated with a hydrophilic material.

Claim 17 reproduced below is representative of the subject matter on appeal.

- 17. A method of making a reinforced smooth cementitious board having a cement skin adjacent to an outer face, comprising:
- (a). depositing a reinforcement fabric and a layer of hydraulic cementitious material, one on the other, wherein the reinforcement fabric comprises an open mesh united with a thin, porous nonwoven web;
- (b). penetrating the open mesh with the layer of hydraulic cementitious material and imbedding the open mesh in the layer of hydraulic material;
- (c). promoting penetration through the thin, porous nonwoven web by a portion of the layer of hydraulic cementitious material to form the cement skin adjacent to the outer face by having the thin, porous nonwoven web comprise alkali resistant polymer fibers coated with a hydrophilic material;

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(d). penetrating through the thin, porous nonwoven web by said portion of the layer

of hydraulic cementitious material to form the cement skin adjacent to the outer face and embed

the thin, porous web in the layer of hydraulic cementitious material at a depth from the outer

face; and

curing the layer of hydraulic cementitious material to form a layer of hardened (e).

cementitious material imbedding the open mesh and the thin, porous nonwoven web at a depth

from the outer face, wherein a portion of the layer of hardened cementitious material comprises

the cement skin adjacent to the outer face.

ISSUES RAISED BY THE EXAMINER'S ANSWER

The issues raised by the Examiner's Answer involve the following:

Whether in Newman et al. a slurry 76 while used without optional slurry 91 at least

partially penetrates a melt blown web 20 of a composite facing sheet 10 constructed of the melt

blown web 20 combined with a mesh 15, and is consistent with forming a cement skin. (Answer

page 19, last two lines), because:

(1.) the Newman et al. patent is silent relative to an interaction of the web 20 with the

slurry 76." (Answer, page 5, last three lines).

(2.) Appellant omits discussion of Newman et al.'s teaching to press the glass fiber facing

sheet (scrim 15 and melt blown fiber [web] 20). into cementitious slurry 76 (Answer foot note

5).

(3.) Figure 8 of Newman et al. shows a facing 72 having a mesh 15 and web 20

mechanically integrated in a cementitious core 80 (Answer page 8, first paragraph).

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(4.) The web 20 is porous and thin (Answer page 8, first paragraph).

(5.) Appellant's claim 17 is generic to a prior art combination wherein, Newman et al. is combined with the secondary references, such that the slurry 76 of Newman et al. would be promoted to penetrate into or through the web 20.

ARGUMENT

The Newman et al. disclosure is significant to resolving this issue. The Newman et al. disclosure is as follows:

Newman et al discloses a process of making a cement board with an open mesh 15 and a melt blown polymer web 20. The melt blown polymer web 20 is a microporous layer 220. (Newman et al. column 8, lines 52-76).

"The microporous layer 220 provides a <u>water resistant surface</u> which nonetheless allows gasses such as <u>water vapor to pass through</u> the facing sheet 210." (Newman et al. Column 7, lines 23-26).

"The <u>microporosity</u> of the layer 220 [Fig. 3] can be particularly desirable in the formation of cement boards because the cement used in the core of the cement board is a <u>hydrated</u> compound and therefore water may be <u>evaporated</u> [as water vapor] from the hydrated cement."

(Newman et al. column 7, lines 26-29). (Emphasis added).

Appellant points out that Newman et al. discloses the melt blown web 20 and its surface are microporous to pass water vapor and to resist water. (Newman et al. column 7, lines 20-34 and column 8, lines 52-57 and quoted above). The slurry 76 is disclosed as a hydrated compound, and is resisted by the microporous web 20 the same as water is resisted. The microporous melt blown web 20 passes water vapor, but slurry 76 can not penetrate as does

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water vapor. It would be inconsistent and not reasonable for a microporous web 20 to pass water vapor and resist water, but be penetrable by a hydrated compound, i.e., slurry 76.

The issue to be resolved on appeal is whether in Newman et al. a slurry 76 while used without optional slurry 91 at least <u>partially</u> penetrates a melt blown web 20 of a composite facing sheet 10 constructed of the melt blown web 20 combined with a mesh 15, and is consistent with forming a cement skin.

The Examiner's Answer addresses the issue and states;

- (1.). "However, a fair reading of the entirety of Newman et al. reveals that the cementitious slurry 76 may be used without slurries 93 and 91." (Answer, page 6, five lines from the bottom). "When slurry 91 is not used the cementitious slurry 76 is forced up through the mesh openings [40] and must extend at least <u>partially</u> through the melt blown web [20]." (Answer, page 6, last line through page 7, second line; and page 19 last three lines).
- (2.). "The use of a single slurry 76 is consistent with the formation of a smooth cement board having a cement skin adjacent to an outer face." (Answer, page 8, lines 12-13).

Appellant points out, the disclosed method in Newman et al. is described with the slurry 91 (See Newman et al. Fig. 6 and columns 9-10). Newman et al. refers to the slurry 91 as optional, but does not disclosure a method to use the slurry 76 without the slurry 91. For this reason, Newman et al. does not disclose that the slurry 76 penetrates the water resistant, microporous web 20.

As pointed out by the Answer, "the patent is <u>silent</u> relative to an interaction of the web 20 with the slurry 76." (Answer, page 5, last three lines). Appellant points out the silence of interaction between the melt blown web 20 and the slurry 76 confirms the slurry 76 does not penetrate the water resistant, microporous web 20.

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Further, Appellant points out that Newman et al. describes the web 20 as microporous to pass water vapor and resist water. And the slurry 76 is a hydrated compound to be resisted by the microporous web 20 the same as water is resisted. (Newman et al. column 7, lines 20-34 and column 8, lines 52-57 and quoted above). For this reason, it would be inconsistent and not reasonable for a water resistant, microporous web 20 to pass water vapor and resist water, but be penetrable by a hydrated compound, i.e., slurry 76.

The Answer further states, "Attention is directed tocol. 9 line 40 [of Newman et al.] When slurry 91 is not used the slurry 76 is forced up through the mesh openings of the facing sheet and must extend at least <u>partially</u> through the melt blown web [20]" (Answer page 6, last line to page 7, line 2). The <u>Answer footnote 5</u> states, "Appellant omits discussion of Newman et al.'s teaching to <u>press</u> the glass fiber facing sheet (scrim 15 and melt blown fiber [web] 20). into cementitious slurry 76. The penetration of the cementitious slurry into the melt blown fiber web occurs during the pressing step."

Appellant points out that Answer footnote 5 apparently refers to the following Newman et al. disclosure: "The glass fiber facing sheet 10, the cementitious slurry 76 or slurries and the facing sheet 12 are then pressed together such as by one or more pressing rolls 80, a doctor blade or any other suitable means. When the glass fiber facing sheet [10] is pressed into the cementitious slurry 76 or slurries, the cementitious slurry is forced up through the [mesh] openings 40 of the glass fiber facing sheet 10. The force of gravity then causes the cementitious slurry 76 to sink back down away from the glass fiber facing sheet 10 and form meniscuses within the mesh openings. Nonetheless the melt blown polymer web 20 prevents the cementitious slurry from sinking into the large mesh openings of the glass fiber facing sheet 10. Instead, the melt blown polymer web 20 maintains a portion of the cementitious slurry 76 on the

surface of the glass fiber facing sheet 10 and causes the slurry to window pane the mesh openings 40 of the glass scrim 15 thereby forming a substantially planar bridge surface between the transverse and longitudinal yarns 25 and 30. As a result, the glass fiber facing sheet 10 becomes mechanically integrated into the cement board 12 once the cementitious slurry 76 or slurries harden to thereby provide a generally uniform planar exterior surface on the cement board 12." (Newman et al. column 9, lines 39-61). In this disclosure, Newman et al. describes the facing sheet 10 being pressed, and gravity then causes the slurry 76 to sink back down away from the facing sheet 10. But no description is present that the slurry 76 penetrates the microporous web 20 that resists water and passes water vapor. This is confirmed by the Answer that points out, "Newman et al. describes the mechanical interaction of the scrim and the slurry and is silent as to interaction between the melt blown web [20] and the slurry." (Answer, page 5, last three lines.). Appellant points out, Newman et al.'s silence of interaction between the melt blown web 20 and the slurry 76 confirms the slurry 76 is not disclosed to penetrate the water resistant, microporous web 20. Moreover, it would be inconsistent and not reasonable for a water resistant, microporous web 20 to pass water vapor and resist water, but be penetrable by a hydrated compound, i.e., slurry 76.

The Answer points out "In order for the meltblown fiber web to function as described above, the cementitious slurry must contact and at least <u>partially</u> penetrate the melt blown fiber web." (Answer page 19, last two lines). However, Appellant point out, because the open mesh or scrim 15 is on the slurry facing side of the melt blown microporous web 20 of Newman et al., (Newman et al. column 9, lines 39-61), the slurry 76 does not have to penetrate the microporous web 20 in order to interact with the open mesh or scrim 15.

Moreover, Newman et al. discloses further evidence that the open mesh or scrim 15 is exposed on the slurry facing side of the microporous web 20, and the facing sheet 10 is mechanically integrated by virtue of the exposed scrim 15. "Because the melt blown web [20] is typically thin and is normally applied to only one face of the glass scrim, the opposed face of the scrim [15] provides an exposed three dimensional grid profile surface which remains available to interact mechanically with hardenable liquids such as the cementitious slurry used in the cement board. Accordingly, when used in forming cement board, the glass fiber facing sheet [10] of the present invention is mechanically integrated into a surface portion of the cementitious core by virtue of the exposed grid profile surface of the scrim [15]." (Newman et al. column 2, lines 43-53). (Underline emphasis added).

Moreover, Newman et al. discloses further evidence that the open mesh or scrim 15 is exposed on the slurry facing side of the microporous web 20, and the facing sheet 10 is mechanically integrated by virtue of the exposed scrim 15. "The opposed surface 50 of the glass scrim 15 is preferably not covered by the melt blown polymer web 20 and defines an exposed three-dimensional grid profile surface 55 as illustrated in FIG. 4. The grid profile surface 55 is available to interact mechanically with a cementitious slurry used in the cement board 12. As described below, this allows the glass fiber facing sheet 10 to be mechanically integrated into a surface portion of the cementitious core by virtue of the exposed grid profile surface 55 of the scrim 15." (Newman et al. column 7, lines 47-56).

The Answer further points out "Newman et al. states: 'As shown in <u>FIG. 8</u>, the glass fiber facing sheet 10 comprising the glass scrim 15 and the melt blown web 20 is <u>mechanically</u> integrated into a surface portion 86 of the cementitious core 80 forming the cement board. In

addition, the <u>facing sheet 72</u> is <u>mechanically integrated</u> into an opposing surface portion of the cementitious core 80'." (Answer page 8, first paragraph) (emphasis added).

However, Newman et al. describes Fig. 8 in conjunction with Figs. 6 and 7. Fig. 6 illustrates apparatus and a method of making a cement board described as having both the slurry 76 and the optional slurry 91. (Newman et al. FIG. 6 and column 9, line 1 through column 10, line 13).

Further, Newman et al. states, "The <u>resulting</u> cement board is illustrated in Fig. 7." And, "FIG. 8 illustrates a cross-section of the cement board 12 illustrated in FIG. 7 along line 8-8." (Newman et al. column 10, lines 10-13) (emphasis added). For these reasons, Figs. 7 and 8 are described in Newman et al. as illustrating a <u>resulting</u> cement board made with <u>both the slurry 76</u> and the optional slurry 91 (as shown in Fig. 6). Therefore, Fig. 8 illustrates the resulting cement board made with both the slurry 76 and the optional slurry 91. For this reason, Fig. 8 can not be relied upon to disclose a cement board having <u>only</u> the slurry 76. (Answer, page 6, last line through page 7, second line; and page 19 last three lines).

Figure 8 in Newman et al. contains further discrepancies. As explained by Newman et al. "... the glass fiber facing sheet [10] of the present invention is mechanically integrated into a surface portion of the cementitious core by virtue of the exposed grid profile surface of the scrim." (Newman et al. column 2, lines 43-53 and quoted above). Moreover, Newman et al. describes the web 20 as microporous to pass water vapor and to resist water. (Newman et al. column 7, lines 20-34 and column 8, lines 52-57 and quoted above). Appellant points out, the slurry 76, a hydrated compound, is resisted by the web 20, and can not penetrate it. For this reason, it would be inconsistent and not reasonable for a water resistant, microporous web 20 to pass water vapor and resist water, but be penetrable by a hydrated compound, i.e., slurry 76. And

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discrepancies to the contrary in Fig. 8 constitute an unreliable description of the patented invention.

According to the Examiner's Answer (page 8, first paragraph). "During evaluation of Figure 8, it is important to appreciate that the melt blown web 20 in Newman et al. is a thin porous web having a basis weight as low as 1 gram per square meter."

But Newman et al. explains that the web is <u>typically thin</u>. "Because the melt blown web [20] is <u>typically thin</u> and is normally <u>applied to only one face of the glass scrim</u>, the opposed face of the scrim [15] provides an exposed three dimensional grid profile surface which remains available to interact mechanically with hardenable liquids such as the cementitious slurry used in the cement board. Accordingly, when used in forming cement board, the glass fiber facing sheet [10] of the present invention is <u>mechanically integrated</u> into a surface portion of the cementitious core <u>by virtue of the exposed grid profile surface of the scrim</u>." (Newman et al. column 2, lines 43-53). (Underline emphasis added).

Appellant points out that Newman et al. recognizes the melt blown polymer web 20 is typically thin (Newman et al. column 2, lines 43-53 and quoted above). Moreover, the disclosed microporous web 20 passes water vapor but resists water. (Newman et al. column 7, lines 20-34 and column 8, lines 52-57 and quoted above). For this reason, despite the web 20 being typically thin, the web 20 passes water vapor and resists water, and further resists the slurry 76 the same as it resists water. It would be inconsistent and not reasonable for the microporous web 20 to pass water vapor and resist water, but be penetrable by a slurry.

Another issue to be resolved on appeal is whether the bottom facing sheet 17, of the same construction as the top facing sheet 10, is penetrated by the slurry 76.

The Examiner's Answer addresses the issue and states: "With respect to the facings, Newman et al teaches that a facing sheet comprising a mesh and a melt blown web may be used for <u>both</u> the [top] facing sheet (10). and the [bottom] facing sheet (72). See Abstract, col 2 lines 53-57, col. 9 lines 4-11 of Newman et al." (Answer page 7, lines 12-15). And (Answer page 4, last three lines).

Appellants point out, the slurry 76 can not penetrate the water resistant, microporous web 20 in the top or bottom facing sheet. The slurry 76 can not penetrate the water resistant, microporous web in the bottom facing sheet 72, because the slurry 76 then would fall away from the bottom facing sheet 72 due to gravity, similarly as described by Newman et al., "The force of gravity then causes the cementitious slurry 76 to sink back down and away from the glass fiber facing sheet 10." (Newman et al. column 9, line 46-48). For this reason, the slurry 76 can not penetrate the web 20 of the bottom facing sheet 17 without then falling away due to gravity. Moreover, that which prevents such slurry falling away in Newman et al. is the microporous web 20 in the bottom facing sheet 72 to pass water vapor and to resist water, and further to resist the slurry 76 and to resist slurry 76 falling away due to gravity.

Another issue to be resolved is whether Appellant's claim 17 is generic to Newman et al. combined with the secondary references, such that the slurry 76 of Newman et al. used alone would be promoted to penetrate into or through a water resistant, microporous web 20.

The issue is raised by the Answer that states: "Claim 17 is generic and reads on using a riser [as in Galer] during the penetration step." (Answer page 26 line 3) (emphasis added). In response, Claim 17 is not based on the use of a riser to promote slurry penetration. Instead Claim 17 is based on penetrating slurry through an open mesh of a composite and promoting slurry penetration through a thin, porous nonwoven web of the composite and for the slurry to form a

cement skin, by having the thin, porous nonwoven web comprise alkali resistant polymer fibers coated with a hydrophilic material. For this reason, the prior art use of a riser to promote slurry penetration is not relevant to promoting slurry penetration by providing a thin, porous nonwoven web comprise alkali resistant polymer fibers coated with a hydrophilic material.

Further, the Answer states, "The way Mathieu and Galer form a cement skin is the same as appellant's way- completely penetrating and submerging fibrous material in the cementitious material." (Answer page 16, lines 15-17). In response, Claim 17 is not based on completely penetrating and submerging fibrous material. Instead Claim 17 is based on penetrating slurry through an open mesh of a composite and promoting slurry penetration through a thin, porous nonwoven web of the composite and for the slurry to form a cement skin, by having the thin, porous nonwoven web comprise alkali resistant polymer fibers coated with a hydrophilic material. Stated differently, the phrase, "completely penetrating and submerging fibrous material," constitutes insufficient description to encompass the claimed method of, penetrating slurry through an open mesh of a composite and promoting slurry penetration through a thin, porous nonwoven web of the composite and for the slurry to form a cement skin, by having the thin, porous nonwoven web comprise alkali resistant polymer fibers coated with a hydrophilic material.

Moreover, to combine Mathieu and Galer with Newman et al. to make the web 20 penetrable by slurry would be inconsistent and not reasonable for the microporous web 20 of Newman et al. to pass water vapor and resist water, but be penetrable by a slurry.

The Answer further states, "Mathieu and Galer provide ample suggestion and motivation to completely imbed Newman et al.'s facing sheet (10). below the surface of the cement board so as to form the claimed cement skin." (Answer page 24, lines 19-21). The Answer, page 25, refers

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to Mathieu, column 15, lines 47-49, wherein Mathieu states, "If desired, the mat may be a mixture of two or more different types of fiber or two or more mats of different fibrous material may be used."

However, Mathieu states: "In this case in order to facilitate this penetration of a mesh by the cementitious composition, the fabric should comprise a sufficient degree of voidage so as to allow the unhardened cementitious composition to penetrate the mesh. In other words, the openings in a mesh, scrim or other fabric in this case are to be sufficiently large to permit passage of the mesh bonding material such as a portland cement slurry, i.e., such that a mesh or scrim is cemented to or imbedded in a face or surface." (Mathieu column 16, lines 34-47) (emphasis added). Similar to Mathieu, Galer discloses a mesh scrim or fabric permitting penetration by the slurry (Galer, column 3, lines 2-17). For this reason, Mathieu discloses "openings sufficiently large" for slurry passage through "mesh, scrim or other fabric in this case." This disclosure in Mathieu is similar to Newman et al.'s open mesh glass scrim 15, wherein the open mesh glass scrim 15 in Newman et al. has openings 40 penetrated by slurry. Moreover, the Newman et al. web 20 that is microporous to pass water vapor and resist water is essential to the patented invention, such that, to make the web 20 penetrable by slurry would be inconsistent and not reasonable for the microporous web 20 of Newman et al. to pass water vapor and resist water, but be penetrable by a slurry.

The method of the claimed invention is not based on a mesh, scrim or other fabric with openings sufficiently large to permit passage of slurry, as in Newman et al.'s scrim 15 and the mesh, scrim or other fabric of Galer and Mathieu. Instead the method of the claimed invention is based on penetrating slurry through an open mesh of a composite reinforcement fabric, and promoting slurry penetration through a thin, porous nonwoven web of the composite and for the

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slurry to form a cement skin, by having the thin, porous nonwoven web comprise alkali resistant polymer fibers coated with a hydrophilic material. Stated differently, a mesh scrim or other fabric in Galer and Mathieu with openings sufficiently large to permit passage of slurry encompasses an open mesh and does not encompass the composite reinforcement fabric in the method of the claimed invention.

The Answer further states, "With respect to promoting penetration it would be obvious... to apply a hydrophilic material in Newman et al.'s process... completely imbedding and forming a cement skin as suggested by Mathieu and Galer." (Answer page 17, last line to page 18 lines 1-4). and (Answer page 24, lines 19-21).

Stated differently, according to the Answer, a web 20 in Newman et al. coated with hydrophilic material would imbed the web 20 in a slurry, similarly as Mathieu and Galer suggest completely imbedding a mesh scrim or fabric without hydrophilic material. Appellant points out, Mathieu and Galer suggest a mesh, scrim or fabric that imbeds in slurry without hydrophilic material. For this reason, Mathieu and Galer supply no reason to provide a hydrophilic material.

Appellant points out, the web 20 of Newman et al. resists water because it is microporous. (Newman et al. column 7, lines 20-34 and column 8, lines 52-57 and quoted above). Providing a hydrophilic material on the microporous web 20 would not change the web 20 to become non-microporous. The microporous web 20 of Newman et al. would continue being microporous when coated with hydrophilic material. And the microporous web 20 would continue to resist the slurry 76 similarly as it would resist water. The secondary references would be unable to promote slurry passage through a web 20 of Newman et al. that is microporous to pass water vapor and to resist water. It would be inconsistent and not reasonable for a

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microporous web 20 in Newman et al. to pass water vapor and resist water, but be penetrable by a slurry.

The Answer further states, "(1.). Canada suggests spraying suitable polymer such as acrylic resin to facilitate penetration of cementitious material (i.e., cement). into fabrics, (2.). Murphy et al suggest coating a scrim with water...and (3.). Palmer teaches imparting a hydrophilic coating [not on a reinforcing fabric]." (Answer page 13 lines 1-6).

Appellant points out that the Answer refers to Canada. But Canada discloses a process for making a cement board that does not constitute a cement skin. Instead, the cement board surface is provided by a fabric that can be painted (Canada page 11, lines 14-16). Moreover, cementitious material does not penetrate through the paintable fabric even though the paintable fabric is treated with a polymer. For this reason, Canada is not relevant to a process of promoting slurry penetration through a fabric to form a cement skin. The Answer points out, "that a wetting agent should be applied to a fabric even when cementitious material only partially penetrates the fabric." (Answer page 29, second paragraph). For this reason, the Answer confirms, Canada describes partial penetration of a fabric by a slurry. But the method of the claimed invention is not based on partial penetration by a slurry. Instead, the method of the claimed invention is based on penetrating slurry through an open mesh of a composite, and promoting slurry penetration through a thin, porous nonwoven web of the composite and for the slurry to form a cement skin. For this reason, Canada's partial penetration of a fabric by slurry to form a cementitious board with a surface fabric that can be painted is not relevant to the method of the claimed invention.

Appellant points out that the Answer refers to Murphy et al. for coating a scrim with water. However, a suggestion of water on the web 20 would mean the water is resisted by the

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water resistant, microporous web 20 of Newman et al. For this reason, Murphy et al. is not relevant.

Appellant points out that the Answer refers to Palmer. Palmer states, "The compositions... are also useful in applications where it is desirable to make a fiber surface more hydrophilic for better adhesion or easier incorporation into water-borne compositions such as cement mixtures or paper pulps." (Palmer column 10, lines 7-12). For this reason, Palmer is cited for imparting hydrophilic coating on structural elements (cement mixtures and paper pulps) that do not encompass a composite reinforcement fabric. For this reason Palmer is not relevant to promoting slurry penetration of a composite reinforcement fabric and forming a cement skin.

The secondary references, Canada, Murphy and Palmer do not disclose a microporous web that is microporous to pass water vapor and to resist water (web 20 in Newman et al.). It would be inconsistent and not reasonable for a microporous web 20 to pass water vapor and resist water, but be penetrable by a slurry. The secondary references, Canada, Murphy and Palmer do not disclose a composite reinforcement fabric. For these reasons, the secondary references can not be properly combined with Newman et al. to encompass, penetrating slurry through an open mesh of a composite reinforcement fabric, and promoting slurry penetration through a thin, porous nonwoven web of the composite and for the slurry to form a cement skin, by having the thin, porous nonwoven web comprise alkali resistant polymer fibers coated with a hydrophilic material.

Another issue to be resolved is whether an embodiment of a reinforcement having a microporous web 20 applied on <u>both</u> faces of a glass scrim 15 is used for making a cement board, and whether such an embodiment encompasses Appellant' claims.

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The Examiner's Answer raises the issue and states, "It is noted that Newman et al teaches and contemplates completely imbedding a meltblown web in the cement because Newman et al teaches that the meltblown polymer web may be applied to both faces of the glass scrim (col.6 lines 1-3)." (Answer page 9, last three lines).

Specifically, Newman et al. states: "A melt blown polymer web 20 is preferably joined to the glass scrim 15 on one face 45 of the scrim, but may be applied on both faces." (Newman et al. column 6, lines 1-3). Appellant points out that Newman et al.'s description of a web 20 applied on both faces of a scrim 15 does not constitute a method. Moreover, Appellant's method of the claimed invention is directed to making a reinforced smooth cement board with an open mesh united with a thin, porous nonwoven web. Stated differently, Appellant's method does not encompass an embodiment of a polymer web on both faces of a scrim. For this reason, Newman et al.'s description of a web 20 applied on both faces of a scrim 15 is not encompassed by the claimed invention.

Further, Appellant points Newman et al.'s description of a web 20 applied on both faces of a scrim 15 constitutes an <u>embodiment</u> of a reinforcement fabric. Moreover, a method of making a cement board using the embodiment of a web 20 applied on both faces of a scrim 15 would not be obvious from Newman et al.'s description of a method using a web 20 on <u>one</u> face 45 of the scrim (Newman et al. columns 9 and 10) such that the scrim is exposed for slurry penetration. Instead, a web 20 on <u>both</u> faces of the scrim 15 would be water resistant on both faces, which would resist penetration of the slurry into the scrim 15. Accordingly, a method of Newman et al. to use an embodiment of a reinforcement fabric having a microporous web 20 on both faces of the scrim 15 is not disclosed, would not be obvious from a method using a web 20 on <u>one</u> face 45 of the scrim 15, and would not be encompassed by the claimed invention.

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penetrable by a slurry.

With respect to the rejections based on the secondary references, Cooper et al. and Schupack, the secondary references do not supply the deficiencies of the other secondary references as being unable to promote slurry passage through a web 20 of Newman et al. that is microporous to pass water vapor and to resist water. It would be inconsistent and not reasonable for a microporous web 20 in Newman et al. to pass water vapor and resist water, but be

Footnote 6 in the Answer refers to the Abstract portion of Appellant's specification to interpret clams on appeal. Similarly, footnote 7 in the Answer refers to another portion of the specification. Appellant points out, MPEP § 2111.01 II. is titled: "It is improper to import claim limitations from the specification." For this reason, Appellant's specification can not be used to import claim limitations into the claims on appeal.

Footnotes 2-5 and 8 in the Answer are not directed toward the contents of the cited references and the claimed invention, respectively. For this reason, footnotes 2-5 and 8 in the Answer are not relevant to the factual inquiry of ascertaining the differences between the prior art and the claimed invention.

EVIDENCE APPENDIX (None)

RELATED PROCEEDINGS APPENDIX (None)

CONCLUSION

Reversal of the final rejection is requested.

Respectfully submitted,

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